

FIGURE 1

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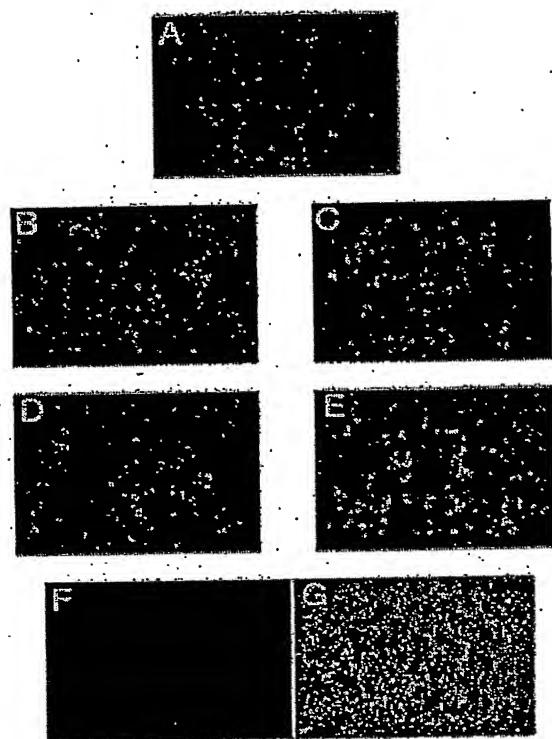


FIGURE 2

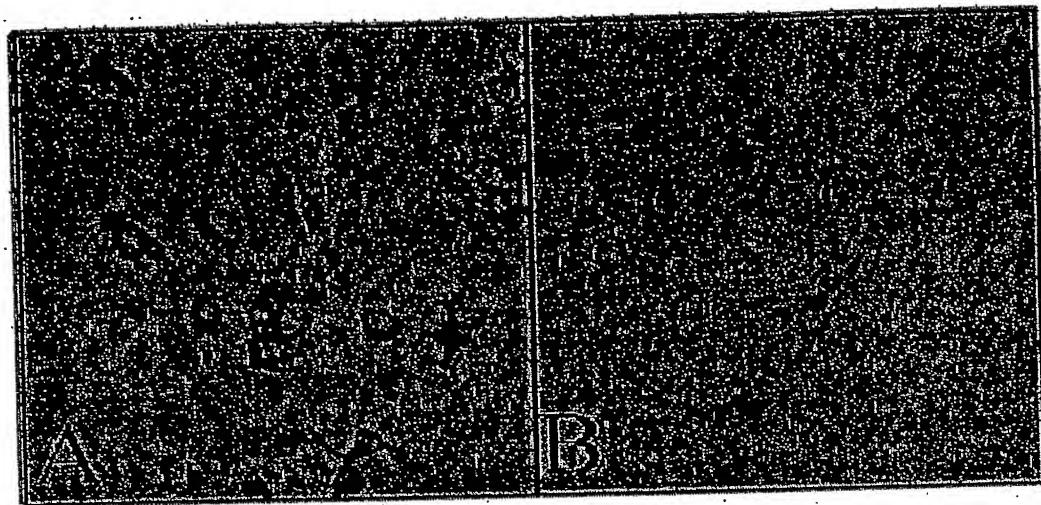


FIGURE 3

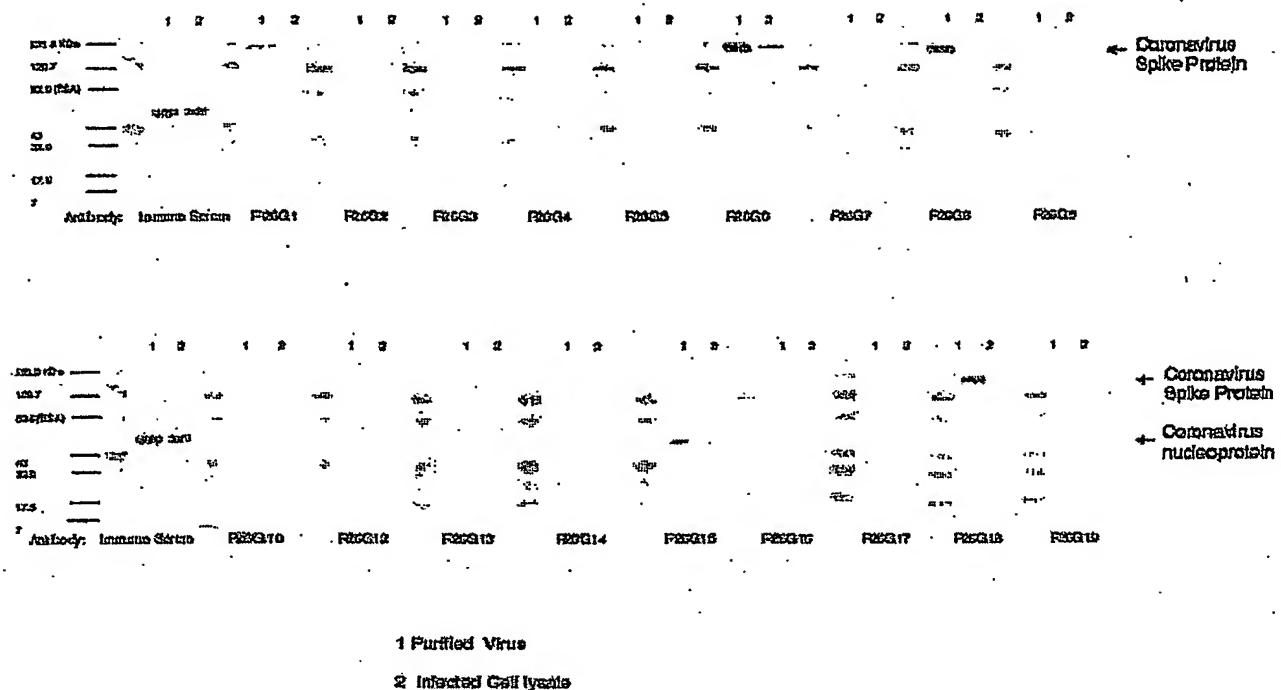


FIGURE 4

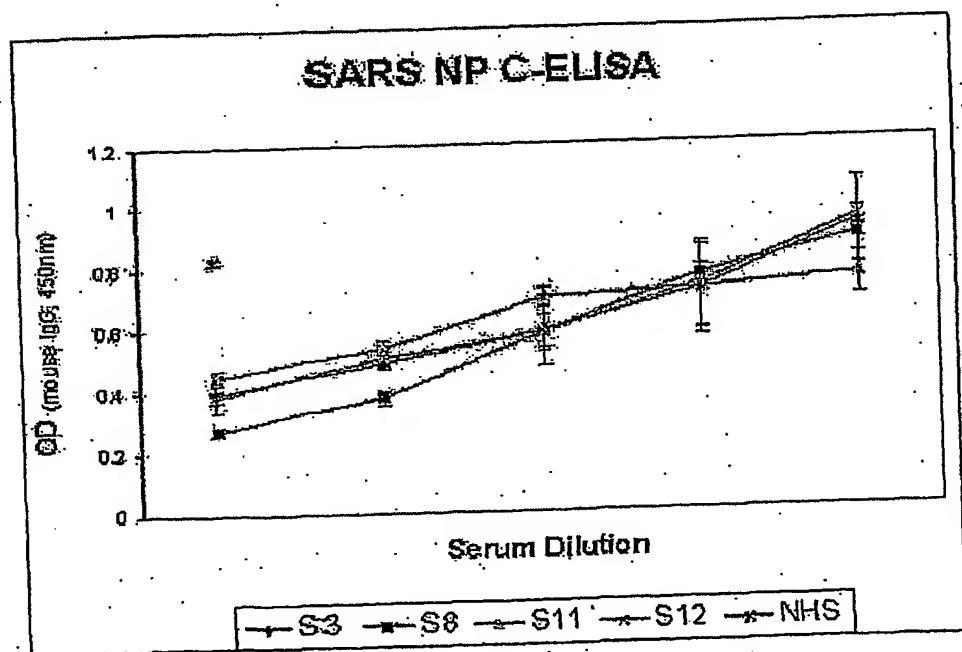
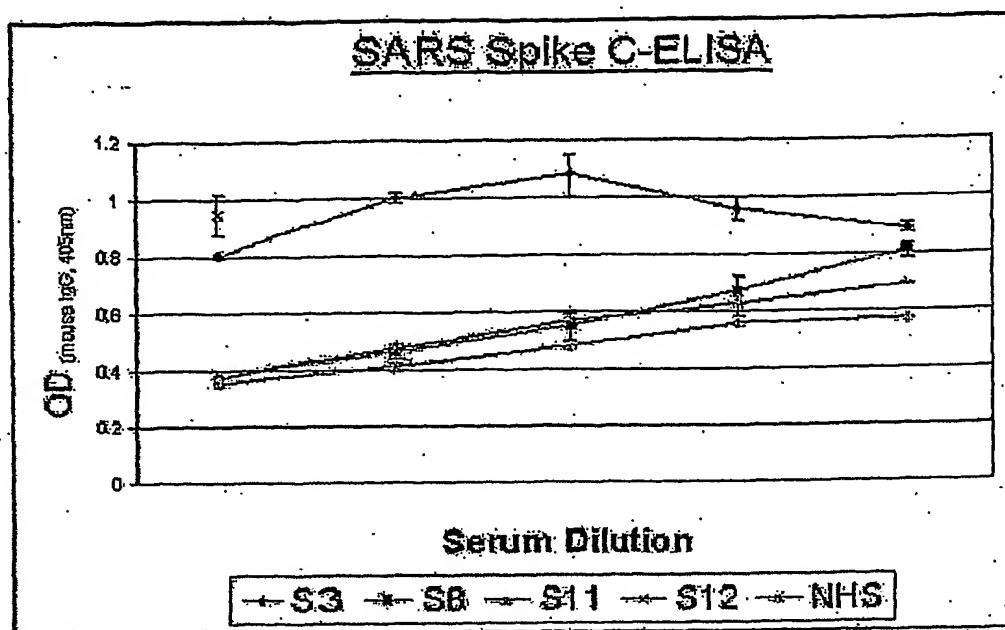


FIGURE 5

SARS-CoV mAb V_L alignment

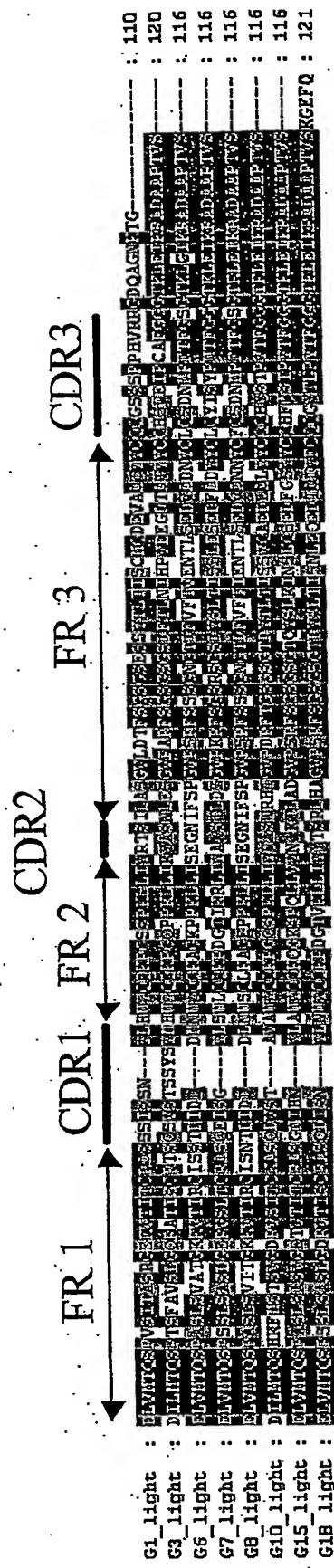


FIGURE 6A

SARS CoV mAb V_H alignment

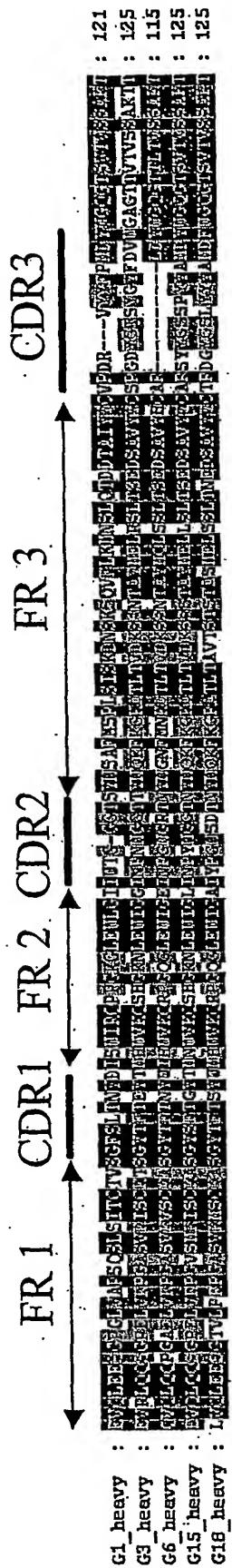


FIGURE 6 B

SARS-specific monoclonal antibodies, Heavy chains (VH), amino acid sequences

F26G3-VH

EVRLQQSGPELVKPGASVKISCKTSGYTFTEYTMHWVKQSHGKNLEWIGGINPNNGTTYNQKFKG
KATLTVDKSSNTAYMELRSLTSEDSAVYYCSRGDYGTSYGYFDVWGAGTTVTVSSAKTTAPSVD
A

F26G7-VH

VELLES GTVLARPGASVKMSCEASGYTFTSYWMHWIKQRPGQGLEWIGAIYPGNSDTTYNQKFKGK
AKLTAVTSTSTAYMELSSLTNEDSAVYYCTREGIPQLLRTMDYWGQGTSVTVSSAKTTPPSV

F26G9-VH

VQLLES GTVLARPGASVKMSCKASGYSFTSYWMHWVKQRPGQGLEWIGAIYPGNSDTSYNQKFKGK
AKLTAVTSASTAYMELSSLTNEDSAVYYCTRSVYYGYGYFDVWGAGTTVTVSSAKTTPPSV

F26G10-VH

EVQLEES GTVLARPGASVKMSCKASGYSFTSYWMHWVKQRPGQGLDWIGAIYPENS DTSYNQKFKG
KAKLTAVTSASTAYMEHSSLTNEDSAVYYCTRSVYYGYGYFDVWGAGTTVTVSSAKTTAPSVD
PVCGDTGSSVTLGCLVKGYFPEPVTLWNSSGSLSSGVHTFPAVLQSDLTYLSSS VTVSSWPSQ
SITCNVAHPASSTKVDKKIEPRVPTSQN

F26G18-VH

LVQLEES GTVLPRPGASVKMSCKASGYSFTSYWMHWVKQRPGQGLEWIGAIYPGNSDTNQKFKG
RATLTAVTSTSTASME LSSLTNEDSAVYYCTRDGYGSLYYAMDFWGQGTSVTVSSAKTTAPSVD

F26G19-VH

EVQLEES GTVLARPGASVKMSCKASGYSFTTYRMHWIKQRPGQGLEWIGAIYPGNSDTTYNQKFKD
KAKLTAVTSTSSAYMELSSLTNEDSAVYFCTREGIPQLLRTLDYWGQGTSVTVSSAKTTAPSVD
A

F26G1-VH

EVQLEES GPGLVAPSQSLSITCTVSGFSLTNYDISWIROPPGKGLEWLGI IWTGGGTSYNSAFMSR
LSISKDNSKSQVFLKMNSLQTDDTAIYYCVRDRVYYFPMDYWGQGTSVTVSSAKTTAPSVD

F26G6-VH

MEWSWVFLFLVATATDVHSQVQLQQPGAE LVKPGASVKVSCKASGYSFTFTNYWIHWVKQRPGQGLEW
IGEINPGNGRTNYNGNFMNKATLTVDKSSNTAYMQLSSLTSEDSAVYHCARLDYWGQGTTLVSSA
KTTPPSV

F26G8-VH

VQLLESGAELVKGASVKVSCKASGYSFTSYWIHWVKQRPGQGLEWIGEINPSNGRTNYNGN FESK
ATLTVDKSSNTAYMHLSSLTSEDSAVYHCTRLDYWGQGTTLVSSAKTTAPSVD

Neutralizing mAbs are in **bold text**.

FIGURE 7

SARS-specific monoclonal antibodies, Light chains (VL), amino acid sequences

F26G3-VL

DILMTQSPTSF AVSLGQRATIS CRTSQSVSTSSY SYMHWYQQKPGQPPKLLIKYASNLESGVPARF
SGSGSGSDFTLNIHPVEEGDTATYYCQHSWEIPCAFGGGTKLEIKRADAAPTVS

F26G7-VL

ELVMTQSPSSLSASLGERVSLTCRASQEISGYLSWLQQKPDGTIKRLIYAASTLDSGVPKRFSGSR
SGSDYSLTISSLESEDFA DYYCLQYISYPWTFGGGTKLEIKRADAAPTVS

F26G9-VL

DILMTQSHKCMSTS VGDRVSITCKASQDVSTAVVWYQQKPGQFPKLLIYWA STRHTGV PDRFTGSG
SGTDYTLTISSVQAEDLALYYCQQHYTTPYTFGGGT KLEIKRADAAPTVS

F26G10-VL

DILMTQSHKFMSTS VGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWA STRHTGV PDRFTGSG
SGTDYTLTISSVQAEDLALYYCQQHYSTPYTFGGGT KLEIKRADAAPTVS

F26G18-VL

ELVMTQSPSSLSASLGDRV TISCRASQDISNYLNWYQQKPDGTVKLLIYYTSRLHAGVPSRFSGSG
SGTDYSLTISSNLEQEDIATYFCQQGYTLPYTFGGGT KLEIKRADAAPTVSKGEFQHTGGRY

F26G19-VL

DILMTQSPSSLSASLGERVSLTCRASQEISGYLSWLQEKP DGTIKRLIYAASTLDSGVPKRFSGSR
SGSDYSLTISSLESEDFA DYYCLQYVSYPWTFGGGTKLEIKRADAAPTV

F26G1-VL

ELVMTQSPV SITASRGEKVTITCRASSSISSNYLHWYQQKPGSSPKLLIYRTSILASGVLDFTSGS
GSESSYTLTISCMQDEVAATYYCQQGSSSPHVRRGDQAGNKTG

F26G6-VL

ELVMTQSPASLSVATGKKVTIRCISSTDIDDDMNWYQQKAGKPPKLLISEGNIFSPGVPSRFSSSG
NGTDFVFTVENTLSEDVADNYCLQSDNMPFTFGSGTKLGIKRADAAPTVS

F26G8-VL

ELVMTQSPASLSVITGKKVTIRCISNTDIDDDLNWSQLKAGEPPKLLISEGNIFSPGVPSRFSSSG
NGTDFVFTIENTLSEDVANNYCFQSDNMPFTFGSGTKLEIKRADAAPTVS

Neutralizing mAbs are in **bold text**.

FIGURE 8

SARS-specific monoclonal antibodies, Heavy chains (VH), nucleotide sequences

F26G3-VH

ATGGAATGGAGCTGGTCTTCTCTTCTCAGGAACGTGCAGGTGCTCTCTGAGGTCCGG
 CTGCAACAGTCTGGACCTGAACCTGGTAAGCCTGGGCTTCAGTGAAGATATCCTGCAAGACTTCT
 GGATACACATTCACTGAATACACCATGCACCTGGTGAAGCAGAGCCATGGAAAGAACCTTGAGTGG
 ATTGGAGGTATTAATCTAATAATGGTGGTACTACCTACAACCAGAAGTTAAGGGCAAGGCCACA
 TTGACTGTAGACAAGTCCTCCAACACAGCCTACATGGAGCTCCGCAGCCTGACATCTGAGGATTCT
 GCAGTCTATTATTGTTCAAGAGGGACTACGGTACTAGCTACGGTACTTCGATGTCTGGGCGCA
 GGGACCACGGTCACCGTCTCAGCCAAAACAACAGCCCCATCGGTATCCACTGGCCA

F26G7-VH

GTGGAGCTGCTCGAGTCAGGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCTGCGAG
 GCTTCTGGCTACACCTTACCACTACTGGATGCACTGGATAAAACAGAGGCCTGGACAGGGTCTG
 GAATGGATTGGCGCTATTATCCAGGAAATAGTGAATACTACCTACAACCAGAAGTTCAAGGGCAAG
 GCCAAACTGACTGCAGTCACATCCACCAAGCACTGCCTACATGGAGCTCAGCAGCCTGACAAATGAG
 GACTCTGCGGTCTATTACTGTACAAGAGAGGAATTCCCCAATTACTTCGGACTATGGACTACTGG
 GGTCAAGGGACCTCAGTCACCGTCTCAGCCAAAACAACACCCCCATCGGTCA

F26G9-VH

GTCCAGCTCGAGTCAGGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCTGCAAG
 GCTTCTGGCTACAGCTTACCACTACTGGATGCACTGGTAAACAGAGGCCTGGACAGGGTCTA
 GAATGGATTGGTGCTATTATCCTGGAAATAGTGAATACTAGCTACAACCAGAAGTTCAAGGGCAAG
 GCCAAACTGACTGCAGTCACATCCGCCAGTACTGCCTACATGGAGCTCAGCAGCCTGACAAATGAG
 GACTCTGCGGTCTATTACTGTACAAGATCCGTTACTACGGCTACGGTACTTCGATGTCTGGGCG
 GCAGGGACCACGGTCACCGTCTCAGCCAAAACAACACCCCCATCGGTCA

F26G10-VH

GAGGTGCAGCTGGAGGAGCTGGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCTG
 AAGGCTTCTGGCTACAGCTTACCACTACTGGATGCACTGGTAAACAGAGGCCTGGACAGGGT
 CTAGATTGGATTGGTGCTATTATCCTGGAAATAGTGAATACTAGCTACAACCAGAAGTTCAAGGGC
 AAGGCCAAACTGACTGCAGTCACATCCGCCAGCAGTCCTACATGGAGCACAGCAGCCTGACAAAT
 GAGGACTCTGGGTCTATTACTGTACAAGATCCGTTACTACGGCTACGGTACTTCGATGTCTGG
 GGCGCAGGGACCACGGTCACCGTCTCAGCCAAGACAACAGCCCCATCGGTCTATCCACTGGCC
 CCTGTGTGGAGATAACAACGGCTCTCGGTGACTCTAGGATGGCTGGTCAAGGGTATTCCCT
 GAGCCAGTGACCTTGACCTGGAAACTCTGGATCCCTGTCCAGTGGTGTGACACCTTCCAGCTGTC
 CTGCAGTCTGACCTCTACACCCCTCAGCAGCTAGTGAATGTAACCTCGAGCACCTGGCCAGCAG
 TCCATCACCTGCAATGTGGCCACCCGGCAAGCAGCACCAAGGTGGACAAGAAAATTGAGCCCAGA
 GTGCCCACTAGTCAGAAC

F26G18-VH

TTGGTGCAGCTGGAGGAGCTGGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCTG
 AAGGCTTCTGGCTACACCTTACCACTACTGGATGCACTGGTAAACAGAGGCCTGGACAGGGT
 CTGGAAATGGATTGGCGCTATTATCCTGGAAATAGTGAATACTAACTACAACCAGAAGTTCAAGGGC
 AGGGCCACACTGACTGCAGTCACATCCACCAAGCAGTCAGCAGCCTGACAAAT
 GAGGACTCTGGGTCTATTACTGTACAAGAGACGGCTATGGTAGCCTTATTACTATGCTATGGAC
 TTCTGGGTCAAGGAACCTCAGTCACCGTCTCAGCCAAAACAACAGCCCCATCGGTCAAGGGC
 GA

FIGURE 9 -1

F26G19-VH

GAGGTGCAGCTGGAGGAGCTGGGACTGTGCTGGCAAGGCCTGGGCTTCAGTGAAGATGTCCTGC
 AAGGCTTCTGGCTACACCTTACCCACCTACCGGATGCAGTGGATAAAACAGAGGCCTGGACAGGGT
 CTGGAATGGATTGGCGCTATTATCCTGGAAATAGTGTACTACCTACAACCAGAAGTTCAAGGAC
 AAGGCCAAACTGACTGCAGTCACATCCACCAAGCTCGCCTACATGGAGCTCAGCAGCCTGACAAT
 GAGGACTCTGCGGTCTATTCTGTACAAGAGAGGAAATTCCCAATTACTTCGGACTTGGACTAC
 TGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCTATCCACTG
 GCC

F26G1-VH

TGAGGTGCAGCTGGAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCCTGTCATTACCTG
 CACTGTCCTGGGTCTCATTAACGAACATATGATATAAGCTGGATTGCCAGCCACCAGGAAAGGG
 TCTGGAGTGGCTTGGAAATAATATGACTGGTGGAGGCACAAGTTATAATTAGCTGCTTATGTCCAG
 ACTGAGCATCAGCAAGGACAACCTCAAGAGCCAAGTTCTAAAAATGAACAGTCTGCAAACACTGA
 TGACACAGCCATATATTACTGTGTAAGAGATAGGGTCTACTACTCCCTATGGACTACTGGGTCA
 AGGAACCTCAGTCACCGTCTCCTCAGCCAAAACAACAGCCCCATCGGTCTATCCACTGGCCA

F26G6-VH

ATGGAATGGAGCTGGGTCTTTCTCTTTGGTAGCAACAGCTACAGATGTCACCTCCAGGTCAA
 CTGCAGCAGCTGGGCTGAACCTGGTGAAGCCTGGGCTTCAGTGAAGGTGTCCTGCAAGGCTTCT
 GGCTACACCTCACCAACTACTGGATACACTGGTGAAGCAGAGGCCTGGACAGGGCTTGAGTGG
 ATTGGAGAGATTAACTCTGGCAACGGTCGTACTAACTATAATGGGAACCTTCATGAACAAGGCCACA
 CTGACTGTAGACAAATCCTCAACACAGCCTACATGCAACTCAGCAGCCTGACATCTGAGGACTCT
 GCGGTCTATCACTGTGCAAGATTAGACTACTGGGCCAAGGCACCACTCTCACAGTCTCCTCAGCC
 AAAACAACACCCCCATCGGT

F26G8-VH

GTCCAGCTGCTCGAGCTGGGCTGAACCTGGTGAAGCCTGGGCTTCAGTGAAGGTGTCCTGCAAG
 GCTTCTGGCTACACCTCACCAAGCTACTGGATACACTGGTGAAGCAGAGGCCTGGACAGGGCTT
 GAGTGGATTGGAGAGATTAACTCTAGCAACGGTCGTACTAACTATAATGGGAACCTTCAGGAGAGCAAG
 GCCACACTGACTGTAGACAAATCCTCAACACAGCCTACATGCACTCAGCAGCCTGACATATGAG
 GACTCTGCGGTCTATCACTGTACAAGATTAGACTACTGGGCCAAGGCACCACTCTCACAGTCTCC
 TCAGCCAAAACAACAGCCCCATCGGTCTATCCACTGGCC

Neutralizing mAbs are in **bold text**.

FIGURE 9-2

SARS-specific monoclonal antibodies, Light chains (VL), nucleotide sequences

F26G3-VL

GGGCCAGCCGCCAGCTGACATTCTGATGACCCAGTCTCCTACTTCCTTGCTGTATCTCTGG
 GGCAGAGGGCCACCATCTCATGCAGGACCAGCCAAAGTGTCACTAGCTATAGTTATATGC
 ACTGGTACCAACAGAAACCAGGACAGCCACCAACTCCTCATCAAGTATGCATCCAACCTAGAAT
 CTGGGGTCCCTGCCAGGTTCACTGGCAGTGGGTCTGGGTCAAGACTTCACCCCTAACATCCATCTG
 TGGAGGAGGGGGATACTGCAACATATTACTGTCACTGGGAGATTCCGTGCGCGTTCGGAG
 GGGGACCAAGCTGAAATAAACGGGCTGATGCTGCACCAACTGTATCC

F26G7-VL

GTGCCAGATGTGAGCTCGTATGACCCAGTCTCCATCCTCTATCTGCCCTCTGGGAGAAAGAG
 TCAGTCTCACTTGTGCGGCCAGTCAGGAATTAGTGGTTATTTAAGCTGGCTCAGCAGAAACAG
 ATGGAACATTAAACGCCGATCTACGCCGATCCACCTTAGATTCTGCTCACCACATCAGCAGCCTTGAGTCTGAAGATTTCGAG
 ACTATTACTGTCTACAATATATTAGTTATCCGTGGACGTTGGGGAGGTACCAAGCTGAAATCA
 AACGGGCTGATGCTGCACCAACTGTATCC

F26G9-VL

GACATTCTGATGACCCAGTCTCACAAATGCATGTCCACATCAGTAGGAGACAGGGTCAGCATTCA
 TGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGTCTGGTATCAACAAAAACCAAGGGCAATTCT
 AAAACTACTGATTTACTGGGCATCCACCCGGCACACTGGAGTCCCTGATCGCTTCACAGGCAGTGG
 TCTGGGACAGATTATACCTCACCATCAGCAGTGTGCAAGACCTGGACTTATTACTGT
 CAGCAACATTATACCACTCCGTACACGTTGGAGGGGGACCAAGCTGAAATAAACGGGCTGAT
 GCTGCACCAACTGTATCC

F26G10-VL

GGGCCAGCCGCCAGCTGACATTCTGATGACCCAGTCTCACAAATTGTCACATCAGTAG
 GAGACAGGGTCAGCATTGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGCCTGGTATCAAC
 AAAAACCAAGGGCAATTCTCTAAACTACTGATTTACTGGGCATCCACCCGGCACACTGGAGTCCCTG
 ATCGCTTCACAGGCAGTGGATCTGGACAGATTATACTCTCACCATCAGCAGTGTGCAAGGCTGAAG
 ACCTGGCACTTATTACTGTCAACATTATAGCAGTCCGTACACGTTGGAGGGGGACCAAGCTGAAATAAACGGGCTGAT
 TGGAAATAAACGGGCTGATGCTGCACCAACTGTATCC

F26G18-VL

GAGCTCGTATGACCCAGTCTCCATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGTCACCATCAGT
 TGCAGGGCAAGTCAGGACATTAGCAATTATTAAACTGGTATCAGCAGAAACCAGATGGAACACTGTT
 AAACCTCTGATCTATTACACATCAAGATTACACGCAGGAGTCCCATCAAGGTTCAAGGGCAGTGG
 TCTGGAACAGATTATTCTCTCACCATTAGCAACCTGGAGCAAGAAGATATTGCCACTTACTTTGC
 CAACAGGGTTATACGCTCCGTACACGTTGGAGGGGGACCAAGCTGAAATAAACGGGCTGAT
 GCTGCACCAACTGTATCCAA

F26G19-VL

GACATTCTGATGACCCAGTCTCCATCCTCTTATCTGCCTCTCTGGGAGAAAGAGTCAGTCTCACT
 TGTGGGCAAGTCAGGAAATTAGTGGTTACTTAAGCTGGCTTCAGGAGAAACCAGATGGAACACTATT
 AAACGCCGATCTACGCCGCTTCCACCTTAGATTCTGGTGTCCCAAAAAGGTTCAAGGGCAGTGG
 TCTGGGTCAGATTATTCTCTCACCATCAGCAGCCTTGAGTCTGAAGATTTGCAGACTATTACTGT
 CTACAATATGTTAGTTATCCGTGGACGTTGGAGGGACCAAGCTGAAATCAAACGGGCTGAT
 GCTGCACCAACTGTAA

FIGURE 10-1

F26G1-VL

GTGCCAGATGTGAGCTCGTGTGACCCAGTCTCCAGTATCCATAACTGCATCTCGAGGGGAGAAGG
TCACCATCACCTGCCGTGCCAGCTCAAGTATAAGTCCAATTACTACACTGGTACCGAGCAGAAGC
CAGGATCCTCCCTAAACTTTGATTTAGGACATCCATCCTGGCATCTGGAGTCTGGACACCT
TCAGTGGCAGTGGGTCTGAGAGCTTACACTCTGACAATCAGCTGCATGCAGGACGAAGTTGCTG
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ATAAAACGGGCTGATGCTGCACCAACTGTATCCA

F26G6-VL

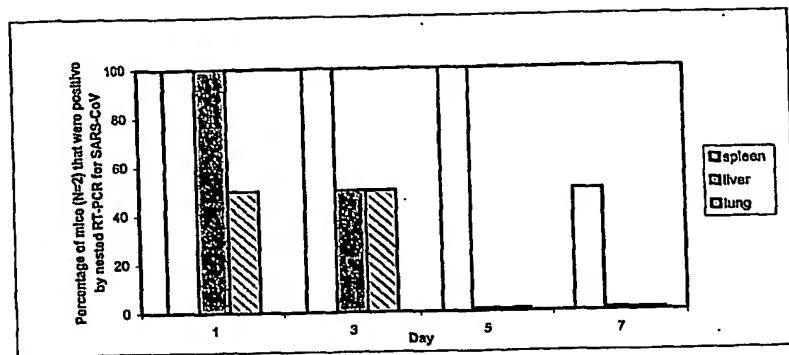
GTGCCAGATGTGAGCTCGTGTGACCCAGTCTCCAGCAGCATCCCTGTCCGTGGCTACAGGAAAAAAAG
TCACCATCAGATGCATAAGCAGCACTGACATTGATGATGATATGAACCTGGTACCGAGCAGAAGGCAG
GAAAACCTCCTAAACTCCTTATTCAGAAGGCAATATTTAGTCCTGGAGTCCCATCCGATTCT
CCAGCAGTGGCAATGGCACAGATTGTTTACAGTGAAAACACGCTCTCAGAAGATGTTGCAA
ATAACTACTGTTGCAAAGTGATAACATGCCATTACGTTCGGCTCGGGACAAAGTTGGAAATAA
AACGGGCTGATGCTGCACCAACTGTATCC

F26G8-VL

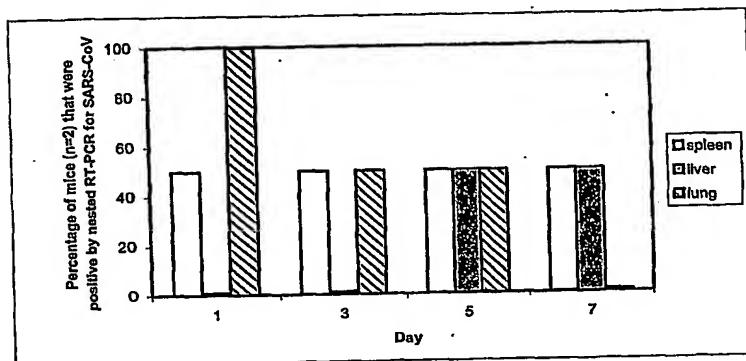
GTGCCAGATGTGAGCTCGTGTGACCCAGTCTCCAGCAGCATCCCTGTCCGTGATTACAGGAAAAAAAG
TCACCATCAGATGCATAAGCAACACTGACATTGATGATGATTGAACTGGTCCCAGCTGAAGGCAG
GAGAACCTCCTAAACTCCTTATTCAGAAGGCAATATTTAGTCCTGGAGTCCCATCCGATTCT
CCAGCAGTGGCAATGGCACAGATTGTTTACAATTGAAAACACGCTCTCAGAAGATGTTGCAA
ATAACTACTGTTCCAAAGTGATAACATGCCATTACGTTCGGCTCGGGACAAAGTTGGAAATAA
AACGGGCTGATGCTGCACCAACTGTATCC

Neutralizing mAbs are in **bold text**.

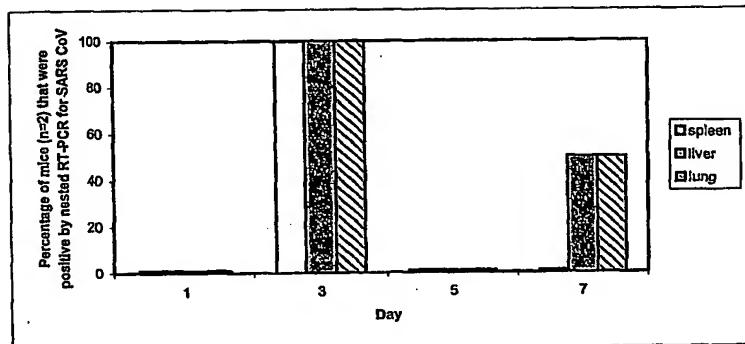
FIGURE 10-2



(A)

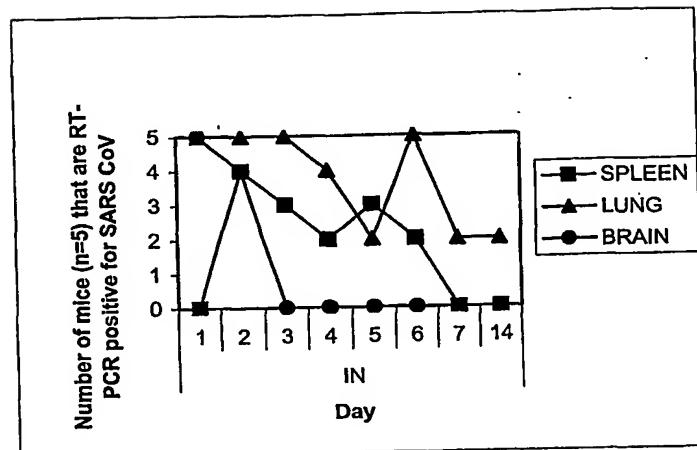


(B)

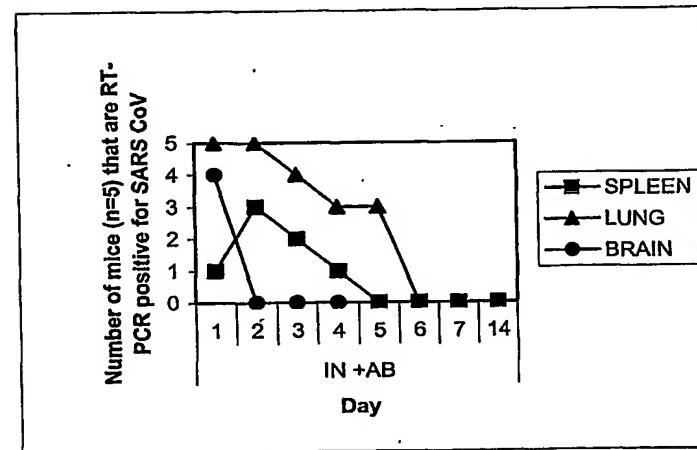


(C)

FIGURE 11



(A)



(B)

Figure 12

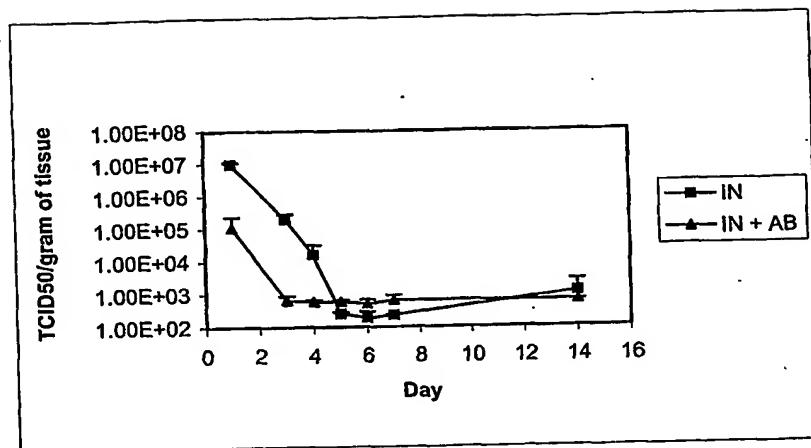


Figure 13

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